## EXHIBIT G FORECAST NEED FOR ELECTRIC AND FUEL TYPE

Combined Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity and for a Base Load Review Order

Public Service Commission Docket No. 2008-196-E

## 1. INTRODUCTION

This **Exhibit G** shows the need of capacity and how SCE&G will meet its 12-18% reserve margin target over the next 15 years. Without the addition of any supply to its existing long term resources of 5,745 MWs, SCE&G's reserve margin would be below its target range currently and fall to 2.0% by 2016. With the addition of 614 MWs of nuclear capacity in 2016, the reserve margin will be 13.0% and with the addition of the second unit in 2019, 16.8%.

## 2. PROJECTED RESERVE MARGIN

		Reserve Margin	(MV	V)	Reserve Margin				
	Firm Load	Without Additions	One year		With Additions				
Year	(MW)	(%)	Purchase	Capacity	(%)				
2008	5,181	10.9	100		12.8				
2009	5,123	11.8	25	-19	12.3				
2010	5,181	9.9	125	-34	12.3				
2011	5,297	7.5	250		12.2				
2012	5,416	5.1	375		12.0				
2013	5,262	8.2	225		12.4				
2014	5,367	6.1	325		12.1				
2015	5,472	4.0	450		12.2				
2016	5,582	2.0		614	13.0				
2017	5,697	-0.1	75		12.0				
2018	5,811	-2.0	225		12.4				
2019	5,924	-3.9		614	16.8				
2020	6,037	-5.7			14.6				
2021	6,146	-7.4			12.6				
2022	6,258	-9.0		93	12.1				

## 3. EXISTING SUPPLY PORTFOLIO AND EXPANSION PLAN

The table on the following page shows SCE&G's existing supply portfolio and the next page shows the expansion plan.

Existing Long Term Sup	= =	C
	In-Service	Summer
	<u>Date</u>	<u>(MW)</u>
Coal-Fired Steam:		
Urquhart – Beech Island, SC	1953	94
McMeekin – Near Irmo, SC	1958	250
Canadys - Canadys, SC	1962	405
Wateree – Eastover, SC	1970	700
*Williams – Goose Creek, SC	1973	615
Cope - Cope, SC	1996	420
Cogen South – Charleston, SC	1999	90
Total Coal-Fired Steam Capacity		<u>2,574</u>
Nuclear:		
V. C. Summer - Parr, SC	1984	644
I. C. Turbines:		
**Burton, SC	1961	0
**Faber Place – Charleston, SC	1961	0
Hardeeville, SC	1968	11
Urquhart – Beech Island, SC	1969	37
Coit – Columbia, SC	1969	30
Parr, SC	1970	60
Williams – Goose Creek, SC	1972	40
Hagood – Charleston, SC	1991	88
Urquhart No. 4 – Beech Island, SC	1999	47
**Un-sited ICTs	2008	34
Urquhart Combined Cycle – Beech Island, SC	2002	467
Jasper Combined Cycle – Jasper, SC	2004	<u>852</u>
Total I. C. Turbines Capacity		<u>1666</u>
Hydro:		
Neal Shoals – Carlisle, SC	1905	2
Parr Shoals – Parr, SC	1914	7
Stevens Creek - Near Martinez, GA	1914	9
*Columbia Canal - Columbia, SC	1927	3
Saluda - Near Irmo, SC	1930	206
Fairfield Pumped Storage - Parr, SC	1978	<u>576</u>
Total Hydro Capacity		803
Other: Long-Term Purchases		25
SEPA		33
Grand Total:		5,745

\* Williams Station is owned by GENCO, a wholly owned subsidiary of SCANA and Columbia Canal is owned by the City of Columbia. This capacity is operated by SCE&G. \*\* Burton (27MW) and Faber Place (8 MW) gas turbine units are currently in non-run status and will be unavailable indefinitely. Two 17 MW un-sited ICTs will replace this lost capacity.

	SCE&G Forecast of Summer Loads and Resources - 2008 COL															
	<u>YEAR</u>	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Load	Forecast															
1	Gross Territorial Peak	5165	5082	5140	5256	5375	5471	5576	5681	5791	5906	6020	6133	6246	6355	6467
2	Less: Demand-Side Mngt	234	209	209	209	209	209	209	209	209	209	209	209	209	209	209
3	Net Territorial Peak	4931	4873	4931	5047	5166	5262	5367	5472	5582	5697	5811	5924	6037	6146	6258
4	Firm Contract Sales	250	250	250	250	250										
5	Total Firm Obligation	5181	5123	5181	5297	5416	5262	5367	5472	5582	5697	5811	5924	6037	6146	6258
Syste	em Capacity															
6	Existing	5745	5745	5726	5692	5692	5692	5692	5692	5692	6306	6306	6306	6920	6920	6920
	Additions															93
7	Peaking/Intermediate															
8	Baseload									614			614			
9	Other		-19	-34												
10	Total System Capacity	5745	5726	5692	5692	5692	5692	5692	5692	6306	6306	6306	6920	6920	6920	7013
11	Firm Annual Purchase	100	25	125	250	375	225	325	450		75	225				
12	Total Production Capability	5845	5751	5817	5942	6067	5917	6017	6142	6306	6381	6531	6920	6920	6920	7013
	rves With Demand Side agment															
13	Margin	664	628	636	645	651	655	650	670	724	684	720	996	883	774	755
14	% Reserve Margin	12.8%	12.3%	12.3%	12.2%	12.0%	12.4%	12.1%	12.2%	13.0%	12.0%	12.4%	16.8%	14.6%	12.6%	12.1%
15	% Capacity Margin	11.4%	10.9%	10.9%	10.9%	10.7%	11.1%	10.8%	10.9%	11.5%	10.7%	11.0%	14.4%	12.8%	11.2%	10.8%
	rves Without Demand Side agement															
16	Margin	430	419	427	436	442	446	441	461	515	475	511	787	674	565	546
17	% Reserve Margin	7.9%	7.9%	7.9%	7.9%	7.9%	8.2%	7.9%	8.1%	8.9%	8.0%	8.5%	12.8%	10.8%	8.9%	8.4%
18	% Capacity Margin	7.4%	7.3%	7.3%	7.3%	7.3%	7.5%	7.3%	7.5%	8.2%	7.4%	7.8%	11.4%	9.7%	8.2%	7.8%